**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION 10**
1200 Sixth Avenue, Suite 155, 14-D12
Seattle, WA 98101-3144

REGIONAL
ADMINISTRATOR'S
DIVISION

December 1, 2022

Nicholas Ettema
FERC – Division of Hydropower Licensing
Chicago Regional Office
230 South Dearborn Street
Chicago, Illinois 60604

Dear Nicholas Ettema:

The U.S. Environmental Protection Agency has reviewed the Federal Energy Regulatory Commission's June 2022 Notice of Intent to Prepare a Supplemental Environmental Impact Statement for the Hells Canyon Project (EPA Project Number 21-0060-FERC). EPA has conducted its review pursuant to the National Environmental Policy Act and its authority under Section 309 of the Clean Air Act. The CAA Section 309 role is unique to EPA and requires EPA to review and comment publicly on any proposed federal action subject to NEPA's environmental impact statement requirement.

According to the NOI, the upcoming SEIS will assess the new and revised fish-related protection, mitigation, and enhancement measures proposed under the 2019 Offer of Settlement with Idaho Power, the Idaho and Oregon water quality certificates, and the draft biological assessments associated with the Hells Canyon Project. The project area is on 5,640 acres, including Bureau of Land Management and U.S. Forest Service lands. The Hells Canyon Project consisted of three developments (Brownlee Dam, Oxbow Dam, and Hells Canyon Dam) on the segment of the Snake River on the border of Idaho and Oregon.

EPA provided recommendations on FERC's previous Draft EIS on November 3, 2006[1] and Final EIS on October 9, 2007.[2] EPA's comments focused on Snake River water temperatures downstream of Hells Canyon Dam exceeding temperature water quality standards to protect salmon and the project's responsibility under the Idaho/Oregon June 2004 Temperature Total Daily Maximum Load to address those exceedances. EPA's previous comments raised concerns that the temperature water quality exceedances were not adequately addressed, and we recommended further analysis and consideration of installing a temperature control structure at Brownlee Dam to help water meet downstream temperature standards.

Thank you for the opportunity to provide scoping comments for this project. EPA offers FERC the enclosed comments, including follow up on our concerns related to the proposed project's impact on temperature water quality and associated impact to aquatic species. If you have questions about this review, please contact Caitlin Roesler of my staff at (206) 553-6518 and roesler.caitlin@epa.gov, or me, at (206) 553-1774 or at chu.rebecca@epa.gov.

Sincerely,

REBECCA CHU

Digitally signed by REBECCA CHU
Date: 2022.12.01 14:23:01 -08'00'

Rebecca Chu, Chief
Policy and Environmental Review Branch

Enclosure

[1] https://cdxapps.epa.gov/cdx-enepa-II/public/action/eis/details?eisId=78104, accessed 12/1/2022.
[2] https://cdxapps.epa.gov/cdx-enepa-II/public/action/eis/details?eisId=78254, accessed 12/1/2022.

**U.S. EPA Detailed Comments on the**
**Hells Canyon Project NOI**
**Idaho (Washington and Adams Counties) and Oregon (Wallowa and Baker Counties)**
**December 2022**

## Water Temperature

Since EPA's 2007 comment letter on the Final EIS, EPA participated in the development of the Idaho and Oregon Clean Water Act § 401 certifications for the Hells Canyon Complex Hydroelectric Project, which were ultimately issued in April 2019. We recommend the Draft Supplemental EIS (DSEIS) describe how FERC is meeting CWA § 401 certification conditions and associated conditions settlement agreements[3] to meet water quality standards.

A significant element of the CWA § 401 certifications is the implementation of Idaho Power Company's (IPC's) Snake River Stewardship Program (SRSP). EPA expects there will be important watershed benefits from implementation of SRSP. The SRSP is anticipated to significantly improve habitat and water quality conditions in the Marsing reach of the Snake River upstream of Brownlee Reservoir, a historically abundant spawning area for fall Chinook salmon.

Under the Brownlee Reservoir drawdown component of the CWA § 401 certifications, IPC will draft Brownlee Reservoir in September and into October if river temperatures below Hells Canyon Dam are predicted to exceed 16.5°C 7-day average daily maximum (7DADM) during the late October salmon spawning period. Drafting water is used as a method to keep river temperature at or below 16.5°C 7DADM during the salmon spawning period. EPA recommends the DSEIS demonstrate how implementation of this measure will meet water quality standards, particularly September water temperature, in the Snake River below the confluence of the Salmon River and in the Lower Snake River below the confluence of the Clearwater River.

Another element of the CWA § 401 certifications is a hypolimnetic pump system (HPS) at Brownlee Dam to access cooler water deeper in the reservoir to cool water released from Brownlee Dam to help meet the spawning water temperature standard downstream of Hells Canyon Dam. EPA recommends that the HPS element and its ability to maintain water temperatures at or below 16.5°C be analyzed in the DSEIS. A feasibility study requirement in the preferred alternative of the DSEIS to analyze both components, drawdown and HPS, would serve to inform the State of Idaho and Oregon's adaptive management process under the CWA § 401 certifications, with opportunity for input from NMFS, State of Washington, Nez Perce Tribe, and others.

If you have specific CWA § 401 concerns, please contact John Palmer at palmer.john@epa.gov.

## Impacts Analysis

EPA recommends the DSEIS describe the applicable scale to categorize the extent of potential impacts to specific resources. Consider the context and intensity of the impact based on four parameters: detectability, duration (i.e., short-term or long-lasting), spatial extent (i.e., localized or widespread), and magnitude (i.e., less than severe or severe, where the term "severe" refers to impacts with a clear, long-lasting change in the resource's function in the ecosystem or cultural context). EPA recommends that the DSEIS transparently account for how subject matter experts applied these criteria to categorize impacts

[3] Nez Perce Tribe v. Oregon Department of Environmental Quality, Case No. 19CV32752 and Pacific Rivers and Idaho Rivers United v. Oregon Department of Environmental Quality, Case No. 19CV32375 ("Consolidated Case No. 19CV32752/19CV32375").

to resources. For example, to increase transparency for the public's understanding, include a breakdown for each resource and stressor/impact and apply the parameters to demonstrate how the resources were assigned a category (i.e., negligible, minor, moderate, and major).

**Scope of Assessment**

***Reasonably Foreseeable Impacts***

Reasonably foreseeable impacts are required to be analyzed in the DSEIS (40 CFR 1502.15). In particular, EPA recommends including a discussion of reasonably foreseeable effects that changes in the climate may have on the proposed project, and what impacts the proposed project will have on climate change consequences. These considerations could help inform the development of measures to improve the resilience of the project.

***Indirect Impacts***

In the DSEIS, include and describe all indirect impacts (i.e., project effects that would not or could not occur except for the implementation of a project).

***Cumulative Impacts***

Cumulative impact analyses describe the threat to resources as a whole presented from the perspective of the resource instead of from the individual project. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time. Discussions of cumulative impacts are usually more effective when included in the larger discussion of environmental impacts from the action (the environmental consequences chapter), as opposed to discussing cumulative impact analyses in a separate chapter.

In the cumulative impacts analysis, please identify how resources, ecosystems, and communities in the vicinity of the project have already been, or will be, affected by past, present, or future activities in the project area. Characterize these resources in terms of their response to change and capacity to withstand stresses. Trends data should be used to establish a baseline for the affected resources, to evaluate the significance of historical degradation, and to predict the environmental effects of the project components.

We recommend focusing on resources of concern or resources that are "at risk" and/or are significantly impacted by the proposed project before mitigation. For this project, we recommend that the DSEIS include a thorough updated assessment of the cumulative impacts to water flows, temperature and dissolved oxygen, sediment, mercury, pH, ammonia, and nutrient concentrations. EPA notes that there has been extensive study and analysis of mercury (methylmercury) and dissolved oxygen since the issuance of the 2007 EIS.

The EPA recommends that the DSEIS identify which resources are analyzed, which ones are not, and why. For each resource analyzed, we recommend including the following:

- Identify the current condition of the resource as a measure of past impacts.
- Identify the trend in the condition of the resource as a measure of present impacts. For example, the health of the resource is improving, declining, or in stasis.
- Identify all on-going, planned, and reasonably foreseeable projects in the study areas which may contribute to cumulative impacts.
- Identify the future condition of the resource based on an analysis of impacts from reasonably foreseeable projects or actions added to existing conditions and current trends.

- Assess the cumulative impacts contribution of the proposed alternatives to the long-term health of the resource and provide a specific measure for the projected impact from the proposed alternatives.

In the DSEIS, consider the cumulative impacts associated with other projects proposed in the area and the potential impacts on various resources including water supply, endangered species, and habitat. We also recommend quantifying cumulative impacts across resources areas, as well as describing and evaluating practicable mitigation measures to avoid and minimize the identified adverse cumulative impacts.

**Alternatives Analysis**

EPA recommends that the DSEIS explore and objectively consider a full range of alternatives and evaluate in detail all reasonable alternatives that fulfill the project's purpose and need. We encourage selection of alternatives that protect, restore, and enhance the environment, and we also support efforts to identify and select alternatives that maximize environmental benefits that avoid, minimize, and/or otherwise mitigate environmental impacts.

In the DSEIS, present the environmental impacts of the proposed action and alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public (40 CFR 1502.14 (b)). Describe how each alternative was developed, how it addresses project objectives, how it will be implemented, and quantify the potential environmental impacts of each alternative to the greatest extent (e.g., acres of habitat impacted; change in water quality). We also recommend comparing the costs and benefits of each of the alternatives, including the costs for required mitigation measures. Further, discuss the reasons for eliminating alternatives to the proposed action (40 CFR 1502.14 (a)).

**Water Resource Impacts**

To fully characterize the impacts to water quality that may result from this project, EPA recommends the DSEIS describe the current conditions of the area (i.e., acreage of wetlands, ditched and natural streams, CWA § 303(d) listed waters, Total Maximum Daily Load plans, etc.).

EPA recommends the DSEIS characterize the direct, indirect, and cumulative impacts that each of the proposed alternatives will have on the current conditions and how each of the alternatives account for and mitigate impacts. EPA recommends that the NEPA analysis also clearly explain how the project fits into broader goals and efforts related to watershed management and water conservation in the area.

Construction activities of the proposed project may be subject to regulatory requirements and require permitting, such as CWA Sections 401, 402, and 404 permits.

***CWA Section 402***

EPA recommends the NEPA document identify any discharges to WOTUS that are known, or are likely, to occur during construction and operation of the project and how these discharges will be managed and minimized. Identify the NPDES permits that will be obtained for the construction phase, new (or modifications to) existing permits for operations, and how any previous permit exceedances could be prevented by incorporating pollution prevention measures into the project. Describe any site-specific best management practices (BMPs) or stormwater pollution prevention plans that will be used during construction to minimize those impacts. Examples of BMP measures to include are: physical measures

like silt fencing; timing and sequencing restrictions; setback provisions from existing streams, riparian areas, or wetlands; equipment decontamination; and/or invasive species management.

***CWA Section 404***

The proposed project may require a permit under Section 404 of the CWA from the U.S. Army Corps of Engineers for the discharge of dredged or fill material into WOTUS. Wetlands, vegetated shallows, mud flats and cobble substrates are all considered special aquatic sites under the CWA § 404(b)(1) Guidelines (40 CFR 230).

EPA recommends that the DSEIS:

- Clearly identify any discharges to WOTUS and describe the impact of those discharges, control measures to be employed to address those impacts, and BMPs to prevent discharge of water and pollutants.
- Includes sufficient information that can serve as at basis to determine whether the project would satisfy the requirements for the Section 404 permit or identify appropriate measures to mitigate the project's impacts to all WOTUS.
- Structure the alternatives analysis so that it is consistent with meeting requirements of both the CWA and NEPA.
- Describe the regulatory criteria and processes utilized to screen potential alternatives and thoroughly evaluate alternatives that would pose less adverse impacts.
- Describe how compensatory mitigation will be quantified and provided to offset impacts, with specific project examples and options as available.

***Aquatic Habitat***

EPA recommends the DSEIS describe aquatic habitats in the affected environment (e.g., habitat type, plant and animal species, functional values, and integrity) and the environmental consequences of the proposed action on these resources. Evaluate impacts to aquatic resources in terms of the impacted acreage and by functions performed. Project construction, operation, and maintenance may affect a variety of aquatic resources. The project has potential to degrade habitat for fish and other aquatic biota, and these resources may experience varying degrees of impacts and alteration of their hydrologic functions. For any impacts that cannot be avoided through siting and design, describe the types, location, and estimated effectiveness of BMPs applied to minimize and mitigate impacts to aquatic resources.

**Wildlife Impacts**

EPA recommends conducting surveys in the project area as part of the impact analysis to identify invertebrate species, flora, and other wildlife present in the project area. Idaho Department of Fish and Wildlife, Oregon Department of Fish and Wildlife conservation groups, and tribal governments may have existing information and resources to support this survey.

EPA recommends the DSEIS analyze the impact of the proposed water withdrawals for filling and maintaining the reservoirs for this project on wildlife, including fish. Include in this analysis identification of any Endangered Species Act species and/or critical habitat. EPA recommends adding outcomes of consultation with U.S. Fish and Wildlife Service, National Marine Fisheries Service, Idaho Department of Fish and Wildlife, and Oregon Department of Fish and Wildlife where there are potential project impacts to federal or state listed species or habitat impacts. We recommend including information about the status of the Biological Opinion associated with the project.

As the proposed reservoirs have potential to attract wildlife (e.g., avian species) consider surrounding hazards that may impact these species. EPA recommends the DSEIS assess this potential risk and include a detailed management strategy to address these issues in the alternatives analysis.

**Air Quality**

EPA recommends the DSEIS include a discussion of ambient air conditions (baseline or existing), National Ambient Air Quality Standards and nonattainment areas, and potential air quality impacts of the proposed project for each alternative. In estimating criteria pollutant emissions for the analysis area, discuss the timeframe for release of these emissions through the license lifespan of the proposed project.

To minimize the environmental impacts of construction related work, EPA recommends the DSEIS identify actions to minimize the impacts to local air quality, especially any fugitive dust and diesel emissions. At a minimum, EPA recommends the DSEIS include a discussion of the following information about the surrounding airshed:

- Any adverse impact on air-quality-related values in a federal Class I area or state wilderness area that may result from this project.
- Annual emissions greater than the basic Prevention of Significant Deterioration emission thresholds that currently exist in the project area.
- Any violation of state or federal ambient air quality standards that may result from this project.
- Interference with the maintenance or attainment of state or federal ambient air quality standards in the analysis area that may result from this project.
- Increases in the frequency or severity of existing violations of state or federal ambient air quality standard in the analysis area.
- Exposure of nearby populations to increased levels of diesel particulate matter and other air toxics, especially during construction phases which might utilize heavy equipment.
- Delays in the timely attainment of standard, interim emission reduction, or other air quality milestone promulgated by the EPA or state air quality agency, or exposure of sensitive receptors to substantial pollutant concentrations.
- Consider potential mitigation measures for construction equipment and fugitive dust that may lessen the severity of the air impacts on the local environment.

**Impacts of Climate Change**

EPA recommends including the following information in the DSEIS:

- Analysis that focuses on the potential for changing climatic conditions, that may impact operations and maintenance of Brownlee Dam, Oxbow Dam, and Hells Canyon Dam in the future.
- Identify how climate resiliency has been considered in the Proposed Action and Alternatives.
- Assess the additive and synergistic impacts of climate change upon local natural resources, such as seasonal water patterns and wildfires, to the proposed project facilities.
- Relate climate change to environmental justice and human health impacts, discuss how the project could prevent environmental damage that harms communities and poses a risk to public health and safety.

Incorporate into the DSEIS modern information related to climate change, such as the reference to the Sixth Assessment Report (AR6), *Climate Change 2021: The Physical Science Basis*, issued by the Intergovernmental Panel on Climate Change (IPCC) and review of the U.S. Global Change Research Program's (USGCRP) Fourth National Climate Assessment Report (NCA4). Regional climate models

project increases of 0% to 20% in extreme daily precipitation, depending on location and definition of "extreme" (for example, annual wettest day). Averaged over the region, the number of days with more than one inch of precipitation is projected to increase 13% in 2041 to 2070 compared with 1971 to 2000 under a scenario that assumes a continuation of current rising emissions trends. This increase in heavy downpours could increase flood risk in mixed rain-snow and rain-dominant basins and could also increase stormwater management challenges for infrastructure.[2] Infrastructure designed for historical climate trends is more vulnerable to future weather extremes and climate change. Impacts include changes to energy performance and corrosion of structures.

EPA suggests the DSEIS prioritize the consideration of climate adaptation and resilience. The long-lived nature of the project infrastructure makes consideration of the ongoing and projected impacts of climate change even more important. It is not sufficient to ensure resilience of the project to risks under current climate conditions. Considering potential climate change impacts helps ensure that investments made today continue to function and provide benefits, even as the climate changes. EPA recommends the DSEIS specifically discuss how climate resiliency has been considered in the design of the proposed action and alternatives, and any other related measures that may be appropriate for inclusion in the staff conclusion and recommendations section.

In addition, climate change presents challenges for communities throughout the U.S., particularly communities with environmental justice concerns. EPA recommends the DSEIS not include inappropriately narrow statements such as, "while the impacts described above taken individually may be manageable for certain communities, the impacts of compound events…can be greater than the sum of the parts" and uses more detailed excerpts from the Northwest chapter of the NCA4.

**Coordination with Tribal Governments**
EPA encourages FERC to consult with and incorporate feedback from the Tribes when making decisions regarding the project. EPA recommends the DSEIS describe the issues raised during the consultations and how those issues were addressed, consistent with Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments.*

**Environmental Justice**
Executive Order 12898 directs federal agencies to identify and address the disproportionately high and adverse human health effects of federal actions on minority and low-income populations, to the greatest extent practicable and permitted by law. EO 13985 on *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* should also be incorporated into FERC's analysis because it includes a modern definition of equity that clarifies a broader approach.

Assessing EPA's Environmental Justice Screening and Mapping Tool (EJScreen) information is a useful first step in understanding locations that may be candidates for further review or outreach.[4] EPA considers a project to be in an area of potential environmental justice (EJ) concern when an EJScreen analysis for the impacted area shows one or more of the eleven EJ Indexes at or above the 80$^{th}$ percentile in the nation and/or state. At a minimum, EPA recommends an EJScreen analysis consider EJScreen information for the block group(s) that contains the proposed action(s) and a one-mile radius around those block groups.

[4] https://ejscreen.epa.gov/mapper/, accessed 12/1/2022.

It is important to consider all areas impacted by the proposed action(s). Areas of impact can be a single block group or span across several block groups and communities.[5] When assessing large geographic areas, consider the individual block groups within the project area in addition to an area-wide assessment. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators.[6] As the screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location and/or proposed project, consider additional information in an EJ analysis to supplement EJScreen outputs. Further review or outreach may be necessary for the proposed action(s). To address these potential concerns, EPA recommends:

- Applying methods from "Environmental Justice Interagency Working Group Promising Practices for EJ Methodologies in NEPA Reviews" report, or the Promising Practices Report, to this project.[7] The Promising Practices Report is a compilation of methodologies gleaned from current agency practices concerning the interface of EJ considerations through NEPA processes.
- Characterizing project site(s) with specific information or data related to EJ concerns.[8]
- Describing potential EJ concerns for all EJ Indexes at or above the 80th percentile in the state and/or nation.
- Describing block groups that contain the proposed action and at a minimum, a one-mile radius around those areas.
- Describing individual block groups within the project area in addition to an area-wide assessment.
- Supplementing data with county level reports and local knowledge.
- Integrating, where available and appropriate, traditional ecological knowledge in evaluating impacts of the proposed project on communities with EJ concerns.

**Monitoring**

As the proposed project has the potential to impact many environmental resources for an extended period, EPA recommends that the project be designed to include an environmental inspection and mitigation monitoring program to ensure compliance with and efficacy of mitigation measures. EPA recommends the DSEIS describe the monitoring program and how it will be used as an effective feedback mechanism so that the project can be adaptively managed over time, and any needed adjustments can be made to the project to meet environmental objectives throughout its lifespan.

**Financial Assurance**

As local, regional, and national conditions fluctuate due to climate change, EPA suggests requiring financial assurance mechanisms in licenses and other authorizations to cover the costs of safety measures and project operation and maintenance, including specific adaptive management plans to contend with changing climatic conditions. EPA also suggests establishing a trust to assist licensees with preventing or responding to accidental catastrophic failures. Careful consideration of local impacts will

[5] Agencies should define community as "either a group of individuals living in geographic proximity to one another, or a geographically dispersed set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions" (Interim Justice40 Guidance – Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad, January 27, 2021).

[6] https://www.epa.gov/ejscreen/technical-documentation-ejscreen, accessed 12/1/2022.

[7] https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf, accessed 12/1/2022.

[8] For more information about potential EJ concerns, refer to the July 21, 2021, Memorandum for the Heads of Departments and Agencies Interim Implementation Guidance for the Justice40 Initiative. https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf, accessed 12/1/2022.

ensure financial assurances for new and existing projects are considered when creating measures to incorporate climate resiliency planning and response mechanisms for infrastructure.